

February 2008: Study of Teacher-Level Value-Added in New York City

In the face of recent news reports describing our on-going study of teacher-level value-added data, concerns have been raised about the intent of the study and the role of the university researchers. Similar to efforts in other states (e.g., Tennessee, Ohio) and school districts (e.g., Houston), the New York City Department of Education (DOE) is exploring ways in which student achievement data can be put to use in identifying effective teaching and improving instruction. To that end, the district has undertaken a pilot project to test the feasibility and usefulness of teacher-level “value-added”— comparisons of achievement when students with similar prior performance (and other “external” considerations such as class size, student-specific characteristics, teacher experience, and various school-wide attributes) are assigned to different teachers. To evaluate the usefulness of the data in a small number of schools, we are working with an independent team of university researchers: Thomas Kane (Harvard University), Jonah Rockoff (Columbia University), and Douglas Staiger (Dartmouth College). These researchers have made advancements in the field of measuring teacher value added and have done several studies measuring teacher effectiveness in New York City.

The primary objectives of the pilot project are to:

- Develop a “value-added” model of teacher impact on student achievement that is statistically sound and provides a responsible basis for comparing teachers by holding constant student, classroom and school factors outside of teacher’s control (e.g. prior-year student achievement, levels of poverty and special needs of the students, teacher years of experience, class size, among many others).
- Determine the model’s validity for a range of potential uses from internal program evaluation, school-level instructional improvement and potentially teacher evaluation.
- Provide “value-added” data reports to a pilot group of principals and evaluate the benefits and challenges of their use of the data.
 - Examine principals’ perceptions of the “value-added” data; their opinions on data accuracy, reporting formats, and training materials; their perception of the data’s usefulness.
 - Also examine the relationship of the data to principals’ subjective ratings of teacher performance as measured by research surveys before and after principals receive value-added data reports.

The pilot project focuses principals in schools serving students in grades four through eight. In the summer of 2007, the DOE offered these principals the opportunity to receive measures of value added at the teacher level as well as training to understand the construction of these measures. Due to time and budget constraints, the DOE could provide the training and value added measures to a limited number of principals. The DOE therefore randomly selected 120 principals to receive data and training from the 240 who volunteered and completed the first research survey for the pilot program. The value-added reports are being produced by the Battelle Institute, an independent contractor to the DOE. All 240 principals will be asked to respond to a follow-up research survey later this spring and the subset of principals that received the reports will be asked about their usefulness.

Several additional points are worth mentioning:

- The university-based researchers cannot identify individual teachers and principals, since any names and identifying information have been scrambled.
- Other than the immediate project management team, DOE officials do not know the names of schools or principals participating. Participants were promised confidentiality to assure them there would be no consequences to their decisions whether or not to volunteer.
- All participating principals have been encouraged to involve their cabinets and broader teaching staff. Some have already, and many more plan to once they become more familiar with the value-added reports and concepts behind them.
- Participants have been instructed not to use the value-added reports for teacher evaluation during the pilot. However they may consider how the reports can contribute to instructional improvement (PD, class assignments, etc)
- We view examining teacher impacts on student achievement as a core function of a high performing schools and school districts. The “value-added” estimates are based on student achievement data already within the NYC data system. With sufficient time and resources, principals could (and some, in fact, do) create their own comparisons of achievement for similar students assigned to different teachers. This system-wide model is seeking to develop (and evaluate the validity of) an analytic tool that rigorously and consistently ensures that measurable student, classroom and school characteristics outside of a teacher’s control are taken into full consideration when drawing comparisons among teachers.
- No decisions have been made on what, if any, roll-out will occur of the value-added data and whether or not the reports should play a role in teacher evaluation in the future. However, we are certain that value-added data would never be the sole criteria for teacher evaluation for any teacher.
- For a number of reasons (including the testing calendar in NYC), questions have been raised in the research community about the amount of measurement error or statistical noise in such metrics. Indeed, that is one of the reasons we are doing the pilot. As stated above, a key goal of the pilot is to test the degree to which the value-added measures are statistically valid and fair for a range of uses and whether they are related to other measures of teacher effectiveness.